covered ground and the flattish upturned roots involuntarily produced this thought — when suddenly, clear and loud, rang out the beautiful notes of the Winter Wren. For a moment I was in doubt whether I was really in Maryland or in Quebec, but if nothing else, the luxuriant growth of rhododendron quickly dispelled any illusion. I had formerly never heard that song here, or if I did, I did not know it, and therefore did not put down this wren as a permanent resident for western Maryland, which it now turns out to be. The Bobolink, by the way, was also recorded for the first time for this vicinity, in a pasture near the village.

Now, as to the anomaly in the A. O. U. Check-List regarding a species of bird of the tops of our eastern mountains. For obvious reasons I did not collect many birds on this last trip. But the few I took confirmed a suspicion I had in my mind since my residence in that part of the country. I took two male D. carulescens. I expected to find some pronounced black on the back, to fit in with the description of D. c. cairnsi, which, according to the Check-List in the resident variety, geographical race or subspecies. They were adult males in high plumage, well colored. But they were not *cairnsi*, as is borne out by a comparison with skins from Canada and Illinois. That brings us into this dilemma: Either D. c. cairnsi is not the prevailing form here, as stated in the Check-List, and D. c. carulescens comes down to not only Pennsylvania, as stated there, but to Maryland; or we have *cairnsi* and *carulescens* together here, which militates against the underlying principle of geographic races and subspecies; or the difference between the two is slight and not constant. If the last explanation is correct, as I am inclined to believe, I should favor doing away with the race cairnsi entirely.— C. W. G. Eifrig, River Forest, Ill.

The Status of the Song Sparrow and the Chipping Sparrow as Early Birds.—Since writing my notes on the 'Morning Awakening' printed in 'The Auk' for April, 1913, I have been paying particular attention to the awakening of the Song and Chipping Sparrows as evidenced by their earliest morning songs. These later observations confirm my conviction that these two birds are much later risers than the Robin. In fact, I should now place the Song Sparrow 25 or 30 minutes after the Robin, instead of only 13 minutes as my earlier observations made it. This discrepancy I account for by the greater care exercised in these recent notes in eliminating from consideration all sporadic night songs and including only the songs that indicated a permanent morning awakening.

The new records are of six mornings in 1913 and five in 1914, all at my house in West Roxbury, Mass. One Song Sparrow sang regularly both seasons very near the house, and often another could be heard not far away, while one or two Chipping Sparrows were always equally in evidence, and no Robin sang near enough to drown the songs of the sparrows. Strange to say, my notes include no records whatever of very early singing on the part of the Chipping Sparrow, which leads me to suspect that the nocturnal singing for which that species is well known may be chiefly confined, in

some localities at least, to the earlier part of the night. (About 10 o'clock in the evening is, I think, a favorite time.) The Song Sparrow, however, does often indulge in song in the very early morning, before he gives evidence of having awakened for the day. The records of the eleven mornings are as follows:—

May 14, 1913. Sunrise 4.24. Song Sparrow sang once at 3.24, then was silent till 3.58, when it began to sing continuously. Robin began at 3.25. Chipping Sparrow sang at 3.40, then was silent till 3.47, when it began to sing continuously. (This preliminary song was an unusual occurrence in my experience.)

May 31, 1913. Sunrise at 4.10. Robin singing when I awoke at 3.15. Song Sparrow sang at 3.20 and again at 3.27, and began frequent singing at 3.29. Chipping Sparrow began at 3.35.

June 1, 1913. Sunrise at 4.10. Robin singing at 3.12, when I awoke. Song Sparrow sang at 3.19 and again at 3.22, and began frequent singing at 3.24. Chipping Sparrow began at 3.32.

June 19, 1913. Sunrise at 4.07. I awoke at 2.45. Song Sparrow sang once at 2.47; another Song Sparrow sang once at 3.07; first bird sang again at 3.20, then at 3.29; second bird began a song-period at 3.48. Robin began at 2.50 (unusually early). Chipping Sparrow began at 3.29.

July 12, 1913. Sunrise at 4.18. Robin singing at 3.15 (estimated), when I awoke. Song Sparrow sang once at 3.30. Chipping Sparrow began at 3.35.

July 18, 1913. Sunrise at 4.23. Awoke at 3. Robin began at 3.42. Song Sparrow sang once at 3.52 and began continuous singing at 3.58. Chipping Sparrow began at 3.56.

April 10, 1914. Sunrise at 5.12. Song Sparrow began at 4.38. Robin began calling at 4.42 and singing at 4.43. The Song Sparrow on this early spring day thus awoke 34 minutes and the Robin 30 minutes before sunrise. As compared with late spring and early summer singing, the Robin was late rather than the Song Sparrow early.

May 29, 1914. Sunrise at 4.11. Robin began at 3.17. Song Sparrow had sung once about 10 minutes earlier but did not sing again till after 3.45. Chipping Sparrow began at 3.33.

June 10, 1914. Sunrise at 4.06. Cloudy and cold. Robin calling at 3.23; began singing at 3.24. Chipping Sparrow began at 3.40. Song Sparrow's beginning later and not noted.

June 14, 1914. Sunrise at 4.06. Robin began at 3.12. Chipping Sparrow sang once at 3.20, again at 3.26, and began morning song at 3.28. Song Sparrow sang twice at 3.41; began in earnest at 3.46.

June 17, 1914. Sunrise at 4.06. Out at 2.45 and listening carefully in all directions about my house for the earliest bird-notes. Nothing heard till 3.13, when Robin began. Chipping Sparrow sang once at 3.20; began in earnest at 3.23. Song Sparrow began at 3.40; another at 3.41. Just before 4.30 the two Song Sparrows were among the more conspicuous singers to be heard. Their failure to begin singing earlier than 3.40 was evidently not due to any marked waning of the song-impulse.

Averaging the eight definite records of the Song Sparrow's complete awakening included in the foregoing notes, I make it 29\% minutes (practically an even half-hour) before sunrise. The average of nine records of the earliest song heard from this species is 45 minutes before sunrise. On eight mornings one or more Song Sparrow songs preceded at varying intervals the full awakening, and on three of these occasions the early songs preceded the Robin, but the average of these earliest songs is about 9 minutes later than the Robin, while the average of what I regard as the actual awakening of the Song Sparrow is 15 minutes later still. The situation is complicated a little by the fact that my Robins and Chipping Sparrows seem to be later risers than the average of their respective species. The average of the six definite records I got here in these two years for the height of the season (excluding the April 10 record) is only 53\frac{3}{2} minutes before sunrise, nearly 10 minutes later than the average obtained from my former observations. My Chipping Sparrows, too, with an average of 36 minutes before sunrise for ten mornings, are some 10 minutes later than my former average. On the other hand, I find that my Crows wake unusually early for this species, the average of eight records made in 1912, 1913, and 1914 being 42 minutes before sunrise, while my previous average from various localities was 34 minutes before sunrise, precisely the same as Mr. H. W. Wright's latest Jefferson, N. H., average ('The Auk,' XXX, 529, October, 1913). This may be because my post of observation is near a nesting-ground of Crows, but, taken in connection with the lateness of my Robins and Chipping Sparrows, it suggests that local or individual variation may account for all such differences. In the case of the Song Sparrow, however, my new notes, made with the matter of nocturnal singing definitely in mind, show a much greater difference, and though local or individual variation may play some part in it, I am moderately certain that it is chiefly to be accounted for by the more careful exclusion of night songs.

These observations strengthen my conviction that the Robin's wellestablished reputation as an early bird cannot be successfully assailed by either of the two sparrows in question. As to the four other birds which Mr. Wright in his paper of October, 1913, ranks ahead of the Robin, it may be pertinent to call attention to the fact that three of them -- the Wood Pewee, Oven-bird, and White-throated Sparrow — are known to be addicted to this same habit of nocturnal singing. Mr. Wright gives good evidence that, on some occasions at least, the Wood Pewee deserves the high rank he gives it, but as to the Oven-bird and the White-throated Sparrow the evidence is not quite so clear. The flight-song of the Ovenbird, is, so far as my experience goes, peculiarly an afternoon and evening performance. I have heard it before noon, but only on rare occasions, and if I heard it in the very early morning I should instinctively regard it as left over from the evening before rather than belonging to the coming day. The White-throated Sparrow has been called the "Nightingale of the North." The last time I heard its morning awakening on its breedingground was on August 8, 1913, on Sunapee Mountain, N. H. It then sang

several times during the night, but its actual awakening followed that of the Hermit Thrush, which began singing at 4.02. The times noted were 4.08, 4.13, and 4.15, when frequent singing began.

I hope that more notes on the morning awakening may be made in many localities. Only thus can we get the data for accurate generalizations. And due allowance for the night-singing habit must be made in all such observations.— Francis H. Allen, West Roxbury, Mass.

## RECENT LITERATURE.

Cooke's 'Distribution and Migration of North American Rails.'

— In this important report Prof. Cooke presents a concise account of the geographic distribution and migration of the rails following the same plan adopted in his previous reports on the shore-birds, herons, etc. The bibliography of North American ornithology is becoming so enormous that it is practically impossible for the individual to compile with any degree of completeness such data as are here presented. The formation of such a card index as has been prepared by Prof. Cooke, from which reports like the present may be readily compiled, constitutes one of the most important pieces of work, from the standpoint of the ornithologist, that the U. S. Biological Survey has undertaken.

Maps showing graphically the summer and winter distribution of each species add greatly to the value of the report. The summary shows that 44 forms of rails and their allies occur north of Panama. Of these 21 are restricted to the West Indies and Middle America and two are stragglers from Europe leaving 21 forms occurring regularly in the United States.

The wanton slaughter of Soras and Clapper Rails by so called sportsmen has sadly reduced the number of these birds and the killing of 3000 of the former species on a 500 acre marsh on the James River, Va., in a single day, or of 10,000 Clapper Rails at Atlantic City, N. J., in a day, are incidents only too well known to those who were familiar with the practices of a few years ago.— W. S.

Wetmore on the Growth of the Tail Feathers of the Giant Horn-bill.2—In this bird, as is well known, the middle pair of rectrices greatly exceed the others in length. The fact that the examination of a considerable series failed to show any in which more than one of the pair was fully

<sup>&</sup>lt;sup>1</sup> Distribution and Migration of North American Rails and their Allies. By Wells W. Cooke. Bull. U. S. Dept. Agriculture, No. 128. Sept. 25, 1914.

<sup>&</sup>lt;sup>2</sup> A Peculiarity in the Growth of the Tail Feathers of the Giant Hornbill (*Rhinoplax vigil*). Proc. U. S. Nat. Mus., Vol. 47, pp. 497–500. October 24, 1914.